CHAPTER 9

ALLEY MAINTENANCE

9.1 INTRODUCTION

Alleys serve a different purpose than roads. While roads are designed to transport vehicles from point A to point B, alleys are narrow passageways between or behind buildings to provide service access, pedestrian access, and shipping/receiving access in urban areas. Because of the difference between roads and alleys, MPW has chosen to evaluate and maintain alleys using different criteria from roadways.

9.2 CONDITION ASSESSMENT FOR SURFACE TYPES

A rating system has been defined for alleys based on the surface type and the unique deterioration characteristics of alleys. Cracking and other distresses that cause significant problems on roadways due to traffic volumes are not a concern in alleyways. Alleys are rated based on surface type and the distress experienced by that surface. Alleys have two surface types, asphalt pavement and DBST (Double Bituminous Surface Treatment). These two surfaces are very different and experience different types of distresses. The type of alley surface and the distress present define the following condition ratings.

9.2.1 Asphalt Pavement

- Very Good: New asphalt pavement
- Good: No raveling, no cracking or potholes
- Fair: Raveling, oxidation, low severity edge cracking, properly patched potholes
- Poor: High severity raveling, cracking, oxidation and potholes
- Very Poor: AC has disintegrated and base problems exist

9.2.2 DBST Pavement

- Very Good: New stone surface
- Good: No significant erosion of stone surface
- Fair: Low severity erosion of stone surface
- Poor: High severity erosion of stone surface with significant pot holes
- Very Poor: Stone surface has disintegrated and base problems exist

9.3 M&R POLICY

9.3.1 Alley Surface Type Selection

MPW uses two different surface types for alleys. The vehicular traffic using the alley determines the type of resurfacing required. Engineering judgment shall be used along with the following guidelines.

1. Alleys with or without significant vehicular traffic that are AC pavements and the AC surface is in poor to very poor condition qualify to be replaced with AC pavements.
2. Alleys with significant vehicular traffic that are DBST and the DBST surface is in good to fair condition qualify to be replaced with DBST.

3. Alleys with significant vehicular traffic that are DBST and the DBST surface is in poor to very poor condition qualify to be replaced with AC.
4. Alleys without significant vehicular traffic that are DBST and the DBST surface is in poor to very poor condition qualify to be replaced with DBST.
5. Alleys without significant vehicular traffic that are DBST and the DBST surface is in good to fair condition, qualify to be replaced with DBST.
6. Alleys not built with DBST or AC pavement do not qualify for resurfacing under this alley maintenance program.

9.3.2 Treatment Selection

Three treatments have been defined for alley M&R activities, as shown in Table 9.1. Treatment selection is based on surface type, traffic type, and condition. Alleys must rate fair or worse to be selected for M&R.

- Mill and overlay: AC with significant vehicular traffic rating fair or worse
- Pave: DBST or unsurfaced with trash truck traffic rating fair or worse
- DBST: DBST or unsurfaced without trash truck traffic rating fair or worse

Table 9.1. Alleyway treatment matrix.

Treatment	Surface	Condition	Truck Traffic
Mill and overlay	AC	Fair or worse	Yes
Pave	DBST or Unsurfaced	Fair or worse	Yes
DBST	DBST or Unsurfaced	Fair or worse	No

9.4 PRIORITIZATION

Prioritization of alleyway M&R is based on condition and traffic volume. Traffic volume is determined by the number of businesses or residences (parcels) with frontage on the alley. Alleys are recommended for M&R in the following order: fair, very poor and poor. This applies M&R to the areas where it is most effective first, but ensures that all alleys will eventually receive M&R. The M&R priority matrix for alleys is shown in Table 9.2.

Table 9.2. Alleyway M&R priority matrix.

Parcels with Frontage	Fair	Very Poor	Poor
2 or less	4	7	9
3 to 5	2	5	8
6 or more	1	3	6